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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,058	07/24/2001	Masayoshi Kobayashi	P/2291-103	6067
2352	7590	11/09/2004	EXAMINER PHILLIPS, HASSAN A	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			ART UNIT 2151	PAPER NUMBER

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/915,058	KOBAYASHI, MASAYOSHI	
	Examiner	Art Unit	
	Hassan Phillips	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-8, 11, 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (AAPA), in view of Stiller et al. (hereinafter Stiller), U.S. Patent 6,130,881.

3. In considering claims 1, 6, and 11, AAPA shows a method, system, and recording medium for transferring information that is not urgent from a server originally holding the information to an information-request source through a network including a plurality of routers. See page 1, line 9, through page 5, line 16.

Although the AAPA shows substantial features of the claimed invention, it fails to expressly disclose: A relay server located on a path between the server and the information-request source.

Nevertheless, relay servers were well known in the art at the time of the present invention. In a similar field of endeavor Stiller shows a method for routing traffic in wireless data networks comprising the steps of: Determining at least one relay server located on a path between a server and an information-request source, wherein the path is set by at least one router in the network; and transferring the information through the path such that each relay server receives the information from upstream, temporarily stores and transmits the same to downstream, (col. 7, lines 2-26).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of AAPA, to implement a relay server located on a path between the server and the information-request source. This would have shown a well known means for properly handling and routing the information being requested.

4. In considering claims 2, 7, and 12, AAPA teaches the information-request source being a cache server for storing a copy of information that is likely to be accessed by a terminal. See page 1, lines 9-14.

5. In considering claims 3 and 8, AAPA teaches the transfer of information from the server to the cache server being caused by the cache server performing at least one

Art Unit: 2151

of an automatic cache updating operation, a link prefetching operation and a cache server cooperating operation. See page 1, lines 9-14.

6. Claims 4, 5, 9, 10, 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, in view of Stiller, and further in view of Horvitz, U.S. Patent 6,067,565.

7. In considering claims 4, 9, and 13, AAPA shows a method, system, and recording medium for transferring information that is not urgent from a server originally holding the information to an information-request source through a network including a plurality of routers. See page 1, line 9, through page 5, line 16.

Although the AAPA shows substantial features of the claimed invention, it fails to expressly disclose: A relay server located on a path between the server and the information-request source.

Nevertheless, relay servers were well known in the art at the time of the present invention. In a similar field of endeavor Stiller shows a method for routing traffic in wireless data networks comprising the steps of: Determining at least one relay server located on a path between a server and an information-request source, wherein the path is set by at least one router in the network; and transferring the information through the path such that each relay server receives the information from upstream, temporarily stores and transmits the same to downstream, (col. 7, lines 2-26).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of AAPA, to show a relay server located on a path between the server and the information-request source. This would have shown a well-known means for properly handling and routing the information being requested.

Although the combined teachings of AAPA and Stiller show substantial features of the claimed invention, they fail to expressly disclose: Requesting a transfer of the information during assigned time slots.

Nevertheless, in a similar field of endeavor, Horvitz discloses a technique for prefetching information comprising: Sending a request for transfer of information to an upstream-located server holding the information, at any one time. See col. 1, lines 8-26.

Thus given the teachings of Horvitz, it would have been apparent to one of ordinary skill in the art to modify the combined teachings of AAPA and Stiller to show a plurality of relay servers each having a time slot previously assigned thereto, and when a current time falls into the time slot assigned thereto, sending a request for transfer of the information to an upstream-located server holding the information. This would have provided an efficient means for prefetching information during times when network bandwidth is low, and thus, allowing the information to be prefetched without interfering with, or affecting, other network traffic, Horvitz, col. 3, lines 23-37.

8. In considering claims 5, and 10, the teachings of Horvitz provide a means for a time slot assigned to each relay server to be determined depending on where the

Art Unit: 2151

relay server is installed, wherein the time slot is a time period during which small traffic is predicted in an area where the relay server is installed. See col. 1, lines 8-26.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shaw et al. U.S. patent 5,745,758, discloses a system for regulating multi-computer data transfer by allocating time slots to designated processing tasks according to communication bandwidth capabilities.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (703) 308-6687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2151

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/
10/21/04



FRANTZ B. JEAN
PRIMARY EXAMINER